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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,824	02/11/2004	Jay D. Steele	555255012707	3385
7590 David B. Cochran, Esq. Jones Day 901 Lakeside Avenue/North Point Cleveland, OH 44114			EXAMINER RASHIDIAN, MOHAMMAD M	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,824	Applicant(s) STEELE ET AL.	
	Examiner Mehdi Rashidian	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hourvitz et al. (US 4,982,343), henceforth referred to as Hourvitz.

Regarding claim 1, Hourvitz discloses, a computer readable medium encoded with an image data structure for facilitating the rendering of an image by an image processing device, comprising: a first data field operable to store opaque data, the opaque data indicating whether image data is transparent or opaque; (fig. 3, abstract, column 1, lines 5-25, column 3, lines 10-25),

- and one or more pixel data fields associated with the first data field, the one or more pixel data fields operable to store first pixel data in each pixel data field when the opaque data indicates an image is opaque, (fig. 3, abstract, column 1, lines 5-25, column 3, lines 27-35, column 6, lines 59-68),

- and operable to store second pixel data and transparency data in each pixel field when the opaque data indicates that the image is transparent (column 7 lines 1-30).

Regarding claim 2, Hourvitz discloses, the computer readable medium of **claim 1**, wherein the one or more pixel data fields comprise: a red pixel data field associated with the first data field, the red pixel data field operable to store first red pixel data when the opaque data indicates an image is opaque, and operable to store second red pixel data and first transparency data when the opaque data indicates that the image is transparent; a green pixel data field associated with the first data field, the green pixel data field operable to store first green pixel data when the opaque data indicates an image is opaque, and operable to store second green pixel data and second transparency data when the opaque data indicates that the image is transparent; (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20, Column 6-7, lines 59-40),

- and a blue pixel data field associated with the first data field, the blue pixel data field operable to store first blue pixel data when the opaque data indicates an image is opaque, and operable to store second blue pixel data and third transparency data when the opaque data indicates that the image is transparent, wherein the first, second and third transparency data specify a transparency level

of a pixel defined by the second red, green and blue pixel data. (column 7, lines 39-60).

Regarding claim 3, Hourvitz discloses, the computer readable medium of **claim 2**, wherein the one or more pixel data fields comprise an approximated 5-6-5 pixel format when the opaque data indicates that the pixel data is transparent. (figs. 2A-2D, column 10, lines 3-25).

Regarding claim 4, Hourvitz discloses, the computer readable medium of **claim 2**, wherein the transparency level defined by the first, second and third transparency data comprise first, second and third bits, respectively, the first bit for selecting one of a plurality of transparency operations for rendering an image and the second and third bits defining bit shifting and masking operands for the selected transparency operation, (figs. 2A-2D, 4, column 14, lines 32-55).

Regarding claim 5, Hourvitz discloses, the computer readable medium of **claim 2**, wherein the first, second and third bits define transparency levels according to a logarithmic increment, (figs. 2A-2D, 4, column 13, lines 8-35).

Regarding claim 6, Hourvitz discloses, a computer implemented method of processing image pixel data corresponding to an image pixel, comprising: determining if the image

pixel is opaque or transparent; if the image pixel is determined to be opaque, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20),

- then determining a pixel color value from a first set of the image pixel data; and if the image pixel is determined to be transparent, then: determining a transparency value from a second set of the image pixel data; and determining a pixel color value from a third set of the image pixel data; wherein the second and third sets of the image pixel data are subsets of the first set of image pixel data, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20).

Regarding claim 7, Hourvitz discloses, the method of **claim 6**, further comprising:

storing the image pixel data in a first memory store; storing displayed image pixel data in a second memory store; (fig. 3, abstract, column 1, lines 5-25, column 9 lines 19-32),

- if the image pixel is determined to be transparent, then: determining a bit shift value based on the transparency value; and performing a bit shift of the bit shift value on the image pixel data stored in the first memory store and displayed image pixel data in the second memory store to determine a new displayed image pixel data. (fig. 3, column 9 lines 19-32).

Regarding claim 8, Hourvitz discloses, the method of **claim 7**, wherein performing a bit

shift of the bit shift value on the image pixel data stored in the first memory store and displayed image pixel data in the second memory store to determine the new displayed image pixel data comprises: selecting a first set of shifting operations if the transparency value corresponds to a first characteristic; and selecting a second set of shifting operations if the transparency value corresponds to a second characteristic, (fig. 3, abstract, column 1, lines 5-25, column 9 lines 19-32).

Regarding claim 9, Hourvitz discloses, the method of **claim 6**, wherein the transparency value is one of a plurality of logarithmic transparency values (figs. 2A-2D, 4, column 14, lines 32-55).

Regarding claim 10, Hourvitz discloses, a mobile communication device including an image processing device, the image processing device operable to process image pixel data corresponding to an image pixel and comprising: means for determining if the image pixel is opaque or transparent; means for determining a pixel color value from a first set of image pixel data when the image pixel is determined to be opaque, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20),

- and means for determining a transparency value from a second set of the image pixel data and for determining a pixel color value from a third set of the image pixel data if the image pixel data is determined to be transparent, wherein the

second and third sets of the image pixel data are subsets of the first set of image pixel data, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20),

Regarding claim 11, Hourvitz discloses, the mobile device of **claim 10**, wherein the means for determining if the image pixel is opaque or transparent comprises a first data field stored in a computer readable medium in the mobile device and operable to store opaque data, the opaque data indicating whether image data is transparent or opaque, (figs. 3, 2A-2D, column 2-3, lines 60-40, column 10, lines 3-25).

Regarding claim 12, Hourvitz discloses, the mobile device of **claim 10**, wherein the means for determining a pixel color value and the means for determining a transparency value comprise one or more pixel data fields associated with the first data field and stored in a computer readable medium in the mobile device, the one or more pixel data fields operable to store first pixel data in each pixel data field when the opaque data indicates an image is opaque, and operable to store second pixel data and transparency data in each pixel data field when the opaque data indicates that the image is transparent, (figs. 3, 2A-2D, column 2-3, lines 60-40, column 10, lines 3-25).

Regarding claim 13, Hourvitz discloses, a mobile communication device, comprising: a display device; a memory module comprising a source image buffer and a destination image buffer, the source image buffer operable to store first image data to be displayed on the display device, and the destination image buffer operable to store second image

data to be displayed on the display device, the second image data comprising a first data field operable to store opaque data, the opaque data indicating whether second image data is transparent or opaque, (figs. 3, 2A-2D, column 2-3, lines 60-40, column 10, lines 3-25).

- and one or more pixel data fields associated with the first data field, the one or more pixel data fields operable to store first pixel color data when the opaque data indicates an image is opaque, and operable to store second pixel color data and transparency data when the opaque data indicates that the image is transparent. (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20, column 6, lines 59-68).

Regarding claim 14, Hourvitz discloses, the mobile communication device of **claim 13**, further comprising an imaging module operable to determine if the second image data is opaque or transparent based on the opaque data, to determine a pixel color value from the first pixel color data if the image is determined to be opaque, and to determine the pixel color value from the second pixel color data and to determine a transparency level from the transparency data if the image is determined to be transparent. (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20, column 6, lines 59-68).

Regarding claim 15, Hourvitz discloses, the mobile communication device of **claim 13**,

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wherein the second pixel color data comprise an approximated 5-6-5 pixel format when the opaque data indicates that the pixel data is transparent, (figs, 2A-2D, column 10, lines 3-25).

Regarding claim 16, Hourvitz discloses, the mobile communication device of **claim 15**, wherein the opaque data comprises first, second and third transparency data bits that collectively define a transparency level, (figs, 2A-2D, column 10, lines 3-25).

Regarding claim 17, Hourvitz discloses, the mobile communication device of **claim 16**, wherein the first bit corresponds to a selection from one of a plurality of transparency operations for rendering an image and the second and third bits defining bit shifting and masking operands for the selected transparency operation, (figs. 2A-2D, 4, column 14, lines 32-55).

Regarding claim 18, Hourvitz discloses, the mobile communication device of **claim 13**, wherein the transparency data defines one of a plurality of logarithmic transparency values, (figs. 2A-2D, 4, column 13, lines 8-35).

Regarding claim 19, Hourvitz discloses, a computer data signal embodied in a carrier wave, comprising: a first data segment comprising opaque data indicating whether image data is transparent or opaque; and one or more pixel data segments associated with the first data segment, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20),

- the one or more pixel data segments storing first pixel data in each pixel data segment when the opaque data indicates an image is opaque, and storing second pixel data and transparency data in each pixel data segment when the opaque data indicates that the image is transparent, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20, column 6, lines 59-68).

Regarding claim 20, Hourvitz discloses, the computer data signal of **claim 19**, wherein the one or more pixel data segments comprise: a red pixel data segment associated with the first data segment, the red pixel data segment storing store first red pixel data when the opaque data indicates an image is opaque, and storing store second red pixel data and first transparency data when the opaque data indicates that the image is transparent; a green pixel data segment associated with the first data segment, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20, Column 6-7, lines 59-40),

the green pixel data segment storing first green pixel data when the opaque data indicates an image is opaque, and storing second green pixel data and second transparency data when the opaque data indicates that the image is transparent; and a blue pixel data segment associated with the first data segment, the blue pixel data segment storing first blue pixel data when the opaque data indicates an image is opaque, and storing second blue pixel data and third transparency data when the opaque data indicates that the image is transparent, (column 7, lines 39-60).

Regarding claim 21, Hourvitz discloses, the computer data signal of **claim 20**, wherein the first, second and third transparency data specify a transparency level of a pixel defined by the second red, green and blue pixel data, (fig. 3, abstract, column 1, lines 5-25, column 3 lines 10-20, Column 6-7, lines 59-40).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chen (US Patent 6,741,261), discloses Alpha-Channel Compositing System.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Rashidian whose telephone number is (571) 272-9763. The examiner can normally be reached on Mon-Thurs 9:00AM to 8:00PM, ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mehdi Rashidian



SAMIR AHMED
SUPERVISORY PATENT EXAMINER